WHAT IS CLAIMED IS:

1. A cutting device for performing cutting operations on a workpiece, said cutting device comprising:

a base assembly for receiving the workpiece;

a support interconnected with said base assembly;

a drive assembly including a motor, an arbor shaft rotatable about an arbor axis, and a cutting tool driven by said motor about said arbor shaft, said drive assembly being pivotally interconnected with said support for selective pivotal movement of said motor and said cutting tool relative to said support assembly between an at-rest position wherein said cutting tool is out of engagement with the workpiece when the workpiece is on said base and an operational position wherein said cutting tool is in a cutting engagement with the workpiece when the workpiece is on said base; and

a guard assembly including a fixed guard partially surrounding a cutting periphery of said cutting tool and a movable guard, said fixed guard being fixedly interconnected with said drive assembly, and said movable guard being pivotally interconnected with said drive assembly for pivotal movement about said arbor shaft between a closed position surrounding a predetermined portion of the cutting periphery of said cutting tool and an open position covering a lesser portion of the cutting periphery of said cutting tool than when in said closed position, said guard assembly further including a linkage assembly for drivingly moving said movable guard between said closed and said open positions as said drive assembly is moved between said at-rest and said operational positions, respectively, said linkage assembly including:

a first link having an inner end pivotally interconnected with said support at a fixed location thereon and an opposite intermediate end;

a second link having an outer end pivotally interconnected with said movable guard and an opposite intermediate end pivotally interconnected with said intermediate end of said first link for pivotal movement relative thereto about an intermediate linkage axis;

an intermediate roller rotatably interconnected with said intermediate ends of said first and second links for rotation about said intermediate linkage axis; and

a cam surface fixed relative to said drive assembly and said fixed guard and engageable by said roller for rotation of said roller thereon.

2. A cutting device according to claim 1, wherein said movable guard is selectively pivotally moveable for overriding pivotal movement about said arbor shaft irrespective of the pivotal position of said drive assembly relative to said support assembly.

3. A cutting device according to claim 2, wherein said roller moves out of engagement with said cam surface during said overriding pivotal movement of said movable guard.

4. A cutting device according to claim 1, wherein said linkage assembly further includes a return spring resiliently biasing said moveable guard toward said closed position.

5. A cutting device according to claim 4, wherein said return spring is a torsional coil spring surrounding said arbor shaft, said torsional coil spring having one end interconnected with said drive assembly at a fixed location thereon and an opposite end interconnected with said movable guard at a fixed location thereon, said torsional coil spring radially expanding when said drive assembly is moved toward said operational position and radially contracting when said drive assembly is moved away from said operational position.

6. A cutting device according to claim 5, wherein said torsional coil spring is circumferentially contained within a spring enclosure on said drive assembly, said spring enclosure surrounding said arbor shaft and being radially offset relative thereto with a larger radial portion of said spring enclosure relative to said arbor shaft being oriented toward an opposite side of said arbor shaft away from the workpiece when said drive assembly is moved into said operational position and a smaller radial portion of said spring enclosure relative to said arbor shaft being oriented toward the workpiece when said drive assembly is moved into said operational position, said spring enclosure thereby allowing for greater radial expansion of said torsional coil spring in a direction away from the workpiece than in a direction toward the workpiece when said drive assembly is moved into said operational position.

7. A cutting device according to claim 1, wherein said cutting tool is removably secured to said arbor shaft by a releasable arbor fastener threadably engageable with an axial end of said arbor shaft, said guard assembly further includes an arbor shaft cover pivotally interconnected with said fixed guard for pivotal movement between a first position at least partially covering said arbor fastener and second position completely uncovering said arbor shaft fastener in order to allow said cutting tool to be removed from said arbor shaft, said arbor shaft cover being selectively and releasably secured in said first position.

8. A cutting device according to claim 7, wherein said arbor shaft cover is releasably secured in said first position by a threaded male arbor cover fastener threadably engaging said fixed guard and threadably extendable axially therewithin to a position wherein an inner axial end of said arbor cover fastener is spaced at a predetermined axial distance from a first side of said cutting tool in order to define a first cutting tool caliper member within said fixed guard, said fixed guard having a second cutting tool caliper member thereon and extending axially therewithin on an opposite side of said cutting tool to a position wherein an inner axial end of said second caliper member is spaced at a predetermined axial distance from said opposite side of said cutting tool, said first and second caliper members being located radially inward of said cutting periphery of said cutting tool and substantially preventing damage to said fixed guard resulting from undesired axial movement of said cutting periphery of said cutting tool when in said predetermined axial positions.

9. A cutting device according to claim 1, wherein said fixed guard includes a pair of caliper members extending axially therewithin to predetermined axial positions on opposite sides of said cutting tool and axially spaced therefrom, said caliper members being located radially inward of said cutting periphery of said cutting tool and substantially preventing damage to said fixed guard resulting from undesired axial movement of said cutting periphery of said cutting tool when in said predetermined axial positions.

10. A cutting device according to claim 1, wherein said base assembly includes an elongated hold-down member pivotally interconnected therewith for selective pivotal movement between a stored position below an upper working surface of said base and a hold-down position wherein a free end of said hold-down member extends upwardly from said working surface toward said drive assembly, said free end of said hold-down member being releasably interconnectable with said drive assembly in order to releasably secure said drive assembly in said operational position.

11. A cutting device according to claim 1, wherein said cutting device is a miter saw.

12. A cutting device according to claim 1, wherein said cutting device is a compound miter saw.

13. A cutting device according to claim 1, wherein said cutting device is a sliding compound miter saw and wherein said drive assembly is slidably movable relative to said support assembly in directions perpendicular to the axis of said arbor shaft.

14. A cutting device according to claim 1, further including a handle assembly fixedly interconnected with said drive assembly, said handle assembly including a horizontally-extending gripping portion generally parallel to said axis of said arbor shaft and adapted to be grasped by a user, said gripping portion being centered horizontally with respect to said cutting tool.

15. A cutting device for performing cutting operations on a workpiece, said cutting device comprising:

a base assembly for receiving the workpiece;

a support interconnected with said base assembly;

a drive assembly including a motor, an arbor shaft rotatable about an arbor axis, and a cutting tool driven by said motor about said arbor shaft, said drive assembly being pivotally interconnected with said support for selective pivotal movement of said motor and said cutting tool relative to said support assembly between an at-rest position wherein said cutting tool is out of engagement with the workpiece when the workpiece is on said base and an operational position wherein said cutting tool is in a cutting engagement with the workpiece when the workpiece is on said base; and

a guard assembly including a fixed guard partially surrounding a cutting periphery of said cutting tool and a movable guard, said fixed guard being fixedly interconnected with said drive assembly, and said movable guard being pivotally interconnected with said drive assembly for pivotal movement about said arbor shaft between a closed position surrounding a predetermined portion of the cutting periphery of said cutting tool and an open position covering a lesser portion of the cutting periphery of said cutting tool than when in said closed position, said guard assembly further including a linkage assembly for drivingly moving said movable guard between said closed and said open positions as said drive assembly is moved between said at-rest and said operational positions, respectively, said guard assembly further including a return spring resiliently biasing said movable guard toward said closed position, said return spring being a torsional coil spring surrounding said arbor shaft, said torsional coil spring having one end interconnected with said drive assembly at a fixed location thereon and an opposite end interconnected with

said movable guard at a fixed location thereon, said torsional coil spring radially expanding when said drive assembly is moved toward said operational position and radially contracting when said drive assembly is moved away from said operational position.

16. A cutting device according to claim 15, wherein said torsional coil spring is circumferentially contained within a spring enclosure on said drive assembly, said spring enclosure surrounding said arbor shaft and being radially offset relative thereto with a larger radial portion of said spring enclosure relative to said arbor shaft being oriented toward an opposite side of said arbor shaft away from the workpiece when said drive assembly is moved into said operational position and a smaller radial portion of said spring enclosure relative to said arbor shaft being oriented toward the workpiece when said drive assembly is moved into said operational position, said spring enclosure thereby allowing for greater radial expansion of said torsional coil spring in a direction away from the workpiece than in a direction toward the workpiece when said drive assembly is moved into said operational position.

17. A cutting device according to claim 15, wherein said movable guard is selectively pivotally moveable for overriding pivotal movement about said arbor shaft irrespective of the pivotal position of said drive assembly relative to said support assembly.

18. A cutting device according to claim 17, wherein said cutting tool is removably secured to said arbor shaft by a releasable arbor fastener threadably engageable with an axial end of said arbor shaft, said guard assembly further includes an arbor shaft cover pivotally interconnected with said fixed guard for pivotal movement between a first position at least partially covering said arbor fastener and second position completely uncovering said arbor shaft fastener in order to allow said cutting tool to be removed from said arbor shaft, said arbor shaft cover being selectively and releasably secured in said first position.

19. A cutting device according to claim 18, wherein said arbor shaft cover is releasably secured in said first position by a threaded male arbor cover fastener threadably engaging said fixed guard and threadably extendable axially therewithin to a position wherein an inner axial end of said arbor cover fastener is spaced at a predetermined axial distance from a first side of said cutting tool in order to define a first cutting tool caliper member within said fixed guard, said fixed guard having a second cutting tool caliper member thereon and extending axially therewithin on an opposite side of said cutting tool to a position wherein an inner axial end of said second caliper member is spaced at a predetermined axial distance from said opposite side of said cutting tool, said first and second caliper members being located radially inward of said cutting periphery of said cutting tool and substantially preventing damage to said fixed guard resulting from undesired axial movement of said cutting periphery of said cutting tool when in said predetermined axial positions.

20. A cutting device according to claim 15, wherein said fixed guard includes a pair of caliper members extending axially therewithin to predetermined axial positions on opposite sides of said cutting tool and axially spaced therefrom, said caliper members being located radially inward of said cutting periphery of said cutting tool and substantially preventing damage to said fixed guard resulting from undesired axial movement of said cutting periphery of said cutting tool when in said predetermined axial positions.

21. A cutting device according to claim 15, wherein said base assembly includes an elongated hold-down member pivotally interconnected therewith for selective pivotal movement between a stored position below an upper working surface of said base and a hold-down position wherein a free end of said hold-down member extends upwardly from said working surface toward said drive assembly, said free end of said hold-down member being releasably interconnectable with said drive assembly in order to releasably secure said drive assembly in said operational position.

22. A cutting device according to claim 15, wherein said cutting device is a miter saw.

23. A cutting device according to claim 15, wherein said cutting device is a compound miter saw.

24. A cutting device according to claim 15, wherein said cutting device is a sliding compound miter saw and wherein said drive assembly is slidably movable relative to said support assembly in directions perpendicular to the axis of said arbor shaft.

25. A cutting device for performing cutting operations on a workpiece, said cutting device comprising:

a base assembly for receiving the workpiece;

a support interconnected with said base assembly;

a drive assembly including a motor, an arbor shaft rotatable about an arbor axis, and a cutting tool driven by said motor about said arbor shaft, said drive assembly being pivotally interconnected with said support for selective pivotal movement of said motor and said cutting tool relative to said support assembly between an at-rest position wherein said cutting tool is out of engagement with the workpiece when the workpiece is on said base and an operational position wherein said cutting tool is in a cutting engagement with the workpiece when the workpiece is on said base; and

a guard assembly including a fixed guard partially surrounding a cutting periphery of said cutting tool and a movable guard, said fixed guard being fixedly interconnected with said drive assembly, and said movable guard being pivotally interconnected with said drive assembly for pivotal movement about said arbor shaft between a closed position surrounding a predetermined portion of the cutting periphery of said cutting tool and an open position covering a lesser portion of the cutting periphery of said cutting tool than when in said closed position, said cutting tool being removably secured to said arbor shaft by a releasable arbor fastener threadably engageable with an axial end of said arbor shaft, said guard assembly further including an arbor shaft cover pivotally interconnected with said fixed guard for pivotal movement between a first position at least partially covering said arbor fastener and second position completely uncovering said arbor shaft fastener in order to allow said cutting tool to be removed from said arbor shaft, said arbor shaft cover being selectively and releasably secured in said first position.

26. A cutting device according to claim 25, wherein said arbor shaft cover is releasably secured in said first position by a threaded male arbor cover fastener threadably engaging said fixed guard and threadably extendable axially therewithin to a position wherein an inner axial end of said arbor cover fastener is spaced at a predetermined axial distance from a first side of said cutting tool in order to define a first cutting tool caliper member within said fixed guard, said fixed guard having a second cutting tool caliper member thereon and extending axially therewithin on an opposite side of said cutting tool to a position wherein an inner axial end of said second caliper member is spaced at a predetermined axial distance from said opposite side of said cutting tool, said first and second caliper members being located radially inward of said cutting periphery of said cutting tool and substantially preventing damage to said fixed guard resulting from undesired axial movement of said cutting periphery of said cutting tool when in said predetermined axial positions.

27. A cutting device according to claim 25, wherein said fixed guard includes a pair of caliper members extending axially therewithin to predetermined axial positions on opposite sides of said cutting tool and axially spaced therefrom, said caliper members being located radially inward of said cutting periphery of said cutting tool and substantially preventing damage to said fixed guard resulting from undesired axial movement of said cutting periphery of said cutting tool when in said predetermined axial positions.

28. A cutting device according to claim 25, wherein said base assembly includes an elongated hold-down member pivotally interconnected therewith for selective pivotal movement between a stored position below an upper working surface of said base and a hold-down position wherein a free end of said hold-down member extends upwardly from said working surface toward said drive assembly, said free end of said hold-down member being releasably interconnectable with said drive assembly in order to releasably secure said drive assembly in said operational position.

29. A cutting device according to claim 25, wherein said movable guard is selectively pivotally moveable for overriding pivotal movement about said arbor shaft irrespective of the pivotal position of said drive assembly relative to said support assembly.

30. A cutting device according to claim 25, wherein said cutting device is a miter saw.

31. A cutting device according to claim 25, wherein said cutting device is a compound miter saw.

32. A cutting device according to claim 25, wherein said cutting device is a sliding compound miter saw and wherein said drive assembly is slidably movable relative to said support assembly in directions perpendicular to the axis of said arbor shaft.

33. A cutting device for performing cutting operations on a workpiece, said cutting device having a cutting tool rotatable on an arbor shaft, said cutting device comprising a handle assembly including a horizontally-extending gripping portion generally parallel to said arbor shaft and adapted to be grasped by a user, said gripping portion being centered horizontally with respect to said cutting tool.

34. A cutting device according to claim 33, wherein said cutting device is a miter saw.

35. A cutting device according to claim 33, wherein said cutting device is a compound miter saw.

36. A cutting device according to claim 33, wherein said cutting device is a sliding compound miter saw and wherein said drive assembly is slidably movable relative to said support assembly in directions perpendicular to the axis of said arbor shaft.

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